An Interesting Case of Management of Life Threatening Calcium Disequilibrium in a Patient with Parathyroid Tumor

Authors: Rajish Shil, Mohammad Ali Houri, Mohammad Milad Ismail, Fatimah Al Kaabi

Abstract: The clinical presentation of Primary hyperparathyroidism can vary from simple asymptomatic hypercalcemia to severe life-threatening hypercalcemic crisis with multi-organ dysfunction, which can be due to parathyroid adenoma or sometimes with malignant cancer. This cascade of clinical presentation can lead to a diagnostic and therapeutic challenge for treating the disease. We are presenting a case of severe hypercalcemic crisis due to parathyroid adenoma with an emphasis on early management, diagnosis, and interventions to prevent any lifelong complications and any permanent organ dysfunction. A 30 years old female with a history of primary Infertility, admitted to Al Ain Hospital critical care unit with Acute Severe Necrotizing Pancreatitis. She initially had a 1-month history of abdominal pain on and off, for which she was treated conservatively with no much improvement, and later on, she developed life-threatening severe pancreatitis, which required her to be admitted to the critical care unit. She was transferred from a private healthcare facility, where she was found to have a very high level of calcium up to 15mmol/L. She received systemic Zoledronic Acid, which lowered her calcium level transiently and later was increased again. She went on to develop multiple end-organ damages along with multiple electrolytes disturbances. She was found to have high levels of Parathyroid hormone, which was correlated with a parathyroid mass on the neck via radiological imaging. After a long course of medical treatment to lower the calcium to a near-normal level, parathyroidectomy was done, which showed parathyroid adenoma on histology. She developed hungry bone syndrome after the surgery and pancreatic pseudocyst after resolving of pancreatitis. She required aggressive treatment with Intravenous calcium for her hypocalcemia as she received zoledronic acid at the beginning of the disease. Later on, she was discharged on long term calcium and other electrolytes supplements. In patients presenting with hypercalcemia, it is prudent to investigate and start treatment early to prevent complications and end-organ damage from hypercalcemia and also to treat the primary cause of the hypercalcemia, with conscious follow up to prevent hypocalcemic complications after treatment. It is important to follow up patients with parathyroid adenomas for a long period in order to detect any recurrence of the tumor or to make sure if the primary tumor is either benign or malignant.

Keywords: hypercalcemia, pancreatitis, hypocalcemia, hyperparathyroidism

Conference Title: ICCMCR 2020: International Conference on Clinical and Medical Case Reports

Conference Location : London, United Kingdom **Conference Dates :** December 10-11, 2020